

### ASMB e-Newsletter

July 6, 2020

e-Volume Number 1 Issue Number 1 Summer 2020

## In This Issue...

- 1. Welcome to the ASMB e-Newsletter
- 2. Biennial Meeting Update
- 3. Trainee Corner
- 4. Research During the Coronavirus Pandemic

### Welcome to the ASMB e-Newsletter!

From Dr. Lynn Sakai, ASMB President (@LynnYSakai1)

In this extraordinary time of Covid-19, the ASMB Communication and Outreach Committee (chaired by Alexandra Naba) has stepped up to keep both our lines of communication open and our science going, while many of our labs have been shut down and scientific meetings have been postponed. The Communication and Outreach Committee has kept us in touch via Twitter and the very stimulating and successful e-Symposia (organized by Ryan Petrie, Joan Chang and Davy Vanhoutte). Today the Committee launches the e-Newsletter (led by Jay Bhave).

It will be new ideas, new energy, and new resolve that will meet the challenges of the post-pandemic era. Many of us have had thoughts

regarding politics and the environment and how we can use these difficult times to make positive changes for the post-pandemic world. I think we should also be thinking about how we can best transform our scientific community for the next era. I have written down some thoughts that can be accessed by clicking here.

I congratulate the Communication and Outreach Committee on their newest endeavor! Thank you so

I, along with hundreds of others who were shaking hands, hugging, and sitting close together, attended the 80thbirthday celebration for Erkki Ruoslahti on February 26, 2020, in La Jolla, CA. On the day that I flew home, Oregon announced its first case of Covid-19, and then each week later, we moved toward shutting down OHSU research labs and non-Covid clinic visits. We postponed a regional symposium on Marfan Syndrome, scheduled for March 14. One by one, meetings announced postponements. After four months of shutdown, I remember Erkki's celebration with great fondness as well as a sense that things will be forever changed afterwards. Here are some thoughts that I took home from Erkki's celebration: Science is competitive but it can also reward you with life-long friendships. Erkki is widely known as the person who named "fibronectin," but in his presentation, he gave credit also to Antti Vaheri and Deanne Mosher. When Richard Hynes spoke, he told a story about being scooped with the naming of "fibronectin," and so years ago he tried out the naming of "integrin" at a meeting, at which Erkki suggested (later in the bar) that "integrin" would not last. Many friends attended the celebration, including Erkki's oldest friend Antti Vaheri from Helsinki and of course his life-long partner Eva Engvall (who invented ELISA). Good mentors are invaluable. Around 60 of Erkki's former postdocs attended the meeting from all over the world (except for those from China, who could not attend because of coronavirus). It was nice for me to see Michael Pierschbacher, Filippo Giancotti, Dieter Zimmermann, and Yu Yamaguchi. Of course, Kristiina Vuori was there, leading the occasion as the President of the Sanford Burnham Prebys Medical Institute. • Critical questions and discussions shape good science. Yu Yamaguchi introduced Erkki and reminisced about the infamous Ruoslahti/Engvalllab meetings that began every day with coffee and doughnuts and ended every day with beer and popcorn. Each member of the lab came prepared to defend their daily experiments! Since Eva Engvall has been my best friend and mentor, I owe my earliest perspectives on science to her, and I appreciate very much being part of the extended family of Eva and Erkki. With them, I grew up in the era of protein discovery (I named "fibrillin" and Eva named "merosin", which was renamed laminin-2, but the muscular dystrophy remains known as "merosin" deficiency), then gene discovery and identification of disease genes. Since then, science has gone through functional genomics and translational research. What will be the post-pandemic trend in science? Of course, the next trend will be driven by new technologies. And these are hard to predict now. But, today we debate whether to listen to the scientists or to the

politicians as we decide how to best handle the coronavirus crisis. "Facts" are compared to "fake news" and to out-right lies. Scientific research has not been immune to these issues. I remember when Eva told me to read an editorial back in the late '90s about the dangers of "hype" in science. In 2020, after years and years of funding levels requiring scores below the 12th-14thpercentiles, "hype" and "politics" in science are common complaints. During this pandemic era, perhaps we have a chance to think in new ways about scientific research and about the structures that we use to conduct scientific research. In the past, we relied on our Pls to provide us with funding and opportunities. Today, along with the challenges of our current circumstances, comes the promise of new opportunities to engage and collaborate. Are there better institutional ways to promote scientific discovery and open critique along with collaboration? Canvirtual meetings create new scientific research teams? How can we extend mentorship to promote new opportunities? As we make plans to re-open our labs with staggered work schedules and sufficient distance between people and with lots of working from home, let's remain critical and competitive while we build new friendships and new extended families. Let's give new life to our scientific values. We can do this!

# **Biennial Meeting Update**

From <u>Jeff Miner</u> (<u>@JeffMinerPhD</u>), ASMB Biennial Meeting Chair and President-Elect

I am sure you are all now aware that the ASMB 2020 biennial meeting scheduled for November in St. Louis has been postponed to **September 12-15, 2021**. The meeting venue (Hyatt Regency St. Louis at the Arch) and

programmatic themes remain the same. I know we will all be hungry for a matrix-focused meeting next year, and you should expect an outstanding program of invited and submitted science presentations. The meeting will feature presentations by several ASMB and ISMB award winners and by leaders in the matrix field, but one of the most important goals of the meeting is to highlight junior matrix biology investigators, both faculty and trainees. The three Special Interest Sessions are organized by and feature junior investigators. We are hoping to institute a new format for touring posters, and many abstract submissions will be chosen for oral presentation. Aside from Travel Awards for junior investigators and support for underrepresented minority participation, there will be a new competition for "lozzo Trainee Awards". Stay tuned to ASMB social media and your email inbox for details. One thing that will be different about the rescheduled meeting will be the St. Louis weather, which can be glorious in September, and more hours of daylight. This will make the social event at the <a href="City Museum">City Museum</a> on Tuesday, September 14 even more enjoyable. Who will dare to enter <a href="MonstroCity">MonstroCity</a>?

#### **Trainee Corner**

In this edition of the Trainee Corner, we are highlighting some of the trainees that are leading our September 2021 Biennial Meeting special sessions.

**Lauren Schmitt** and **Max McCabe** (<u>@ecmatlas</u>) are graduate students in <u>Kirk Hansen's lab</u> at University of Colorado Anschutz Medical Campus and will be hosting a session entitled "ECM Characterization Modalities."

As a research assistant in Dr. Hansen's lab, Lauren contributed to collaborative projects highlighting the importance of the ECM in various disease states. Now in grad school, her focus has moved towards the structural characterization of fibrin blood clots using ECM-focused extraction and cross-linking mass spectrometry. Max is primarily interested in how

the ECM is involved in tissue regeneration and regenerative therapies. By composing an atlas of ECM composition across different tissues and organisms using ECM-optimized proteomics, he will identify ECM components which drive regenerative wound healing in *Acomys cahirinus*. Ultimately, his goal is to use this information, alongside cell culture-based assays,

to correlate ECM composition to regenerative outcome and improve the rational design of bioengineered tissue scaffolds. During the current pandemic, both students are working from home. Lauren is finishing manuscripts and preparing for her comprehensive exam, while Max is writing and processing the many MS runs needed to compose the mouse ECM Atlas.

**David Peeney** (<u>@DavidPeeney</u>), a postdoctoral fellow at the National Cancer Institute in the <u>laboratory of Dr.William G. Stetler-Stevenson</u>, tells us a bit about his scientific interests and the session he is organizing entitled "Not Just Tissue Inhibitors of Metalloproteinases (TIMPs)."

My interests in tissue inhibitors of metalloproteinases (TIMPs) and their multifunctional capabilities was birthed when I started my postdoc at NCI. My PhD was focused on the tumor microenvironment, so continuation of my training at NCI was a natural step. Although TIMPs are stable and (mostly) soluble proteins, they are surprisingly difficult to study. This is likely down to their promiscuous nature that has produced inconsistent reports of their activity, particularly in pathological states such as cancer. Fueled by these observations and exciting evidence of their therapeutic utility, I have recently extended my stay at NCI as a research fellow. Despite their multifunctional capabilities, TIMP proteinase-independent activities are routinely overlooked, highlighting the importance of the special interest session on TIMPs at ASMB 2020. Like all other wet lab scientists, COVID-19 has put the brakes on our research. On the plus side, I have acquired two furry helpers for the preparation of my most recent manuscript.

### **Research During the Coronavirus Pandemic**

The ASMB Outreach and Communications Committee has enjoyed trying to keep the ASMB connected during the COVID19 pandemic. We have reflected on these unprecedented times and share some of our quick thoughts as we look forward to safely return to our research endeavors.



Joan Chang (<u>@tranejoan</u>): "Physically distant yet socially connected!" Ryan Petrie (<u>@Dr Lobopodia</u>): "It's all theoretical."

Alexandra Naba (@NabaLabUIC): "While the last 3 months have been challenging, I have been inspired by my students who have shown incredible resilience and dedication to pursue their research projects, write manuscripts and fellowship applications, and continue to learn, while adjusting to a new normal. I also loved seeing during our lab meetings pictures of the many breads, cookies, macarons, cakes, and flans they have been baking!"

Justin Weinbaum (@VascularECM): "Bench research as we used to know it has not been happening, but writing has been successful and the students are now eager to get back to lab." Davy Vanhoutte (@davy vanhoutte): "Although the last couple of months have been extremely challenging, it has created opportunity for personal and professional reflection and showed me how we as scientists/people can adapt, learn, grow and reinvent ourselves when needed. This experience will undoubtedly put a positive mark on the exciting "new" future that lies ahead of us! "

Jay Bhave: "Distance makes the heart grow fonder."

Twitter Website Calendar

American Society for Matrix Biology